

AMENDMENTS TO THE CLAIMS

The following Listing of Claims replaces all previous listings of claims in the application.
Claim 6 has been canceled without prejudice or disclaimer.

Listing of Claims:

1. (Currently amended) A process for preparing optically active hydroxy-, alkoxy-, amino-, alkyl-, aryl- or chlorine-substituted alcohols or hydroxy carboxylic acids having from 3 to 25 carbon atoms or their acid derivatives or cyclization products, the process comprising hydrogenating a substituted optically active mono- or dicarboxylic acids or their acid derivatives acid or acid derivative thereof in the presence of a catalyst whose active component comprises a noble metal selected from the group of the metals consisting of Pt, Pd, Rh, Ir, Ag, Au and Au and at least one further element selected from the group consisting of Sn, Ge, Mo, W, Ti, Zr, V, Mn, Fe, Co, Ni, Cu, Zn, Ga, In, Pb, Bi, Cr, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu and Lu,

wherein the substituted optically active mono- or dicarboxylic acid or acid derivative thereof has at least one stereocenter in the α- or β-position to at least one carboxylic acid function or acid derivative function to be hydrogenated.

2. (Previously presented) The process according to claim 1, wherein the noble metal is selected from the group consisting of Pt, Pd, Rh and Ir.

3. (Previously presented) The process according to claim 1, wherein the at least one further element is selected from the group consisting of Sn, Ge, Cr, Mo and W.

4. (Previously presented) The process according to claim 1, wherein the at least one further element is Sn.

5. (Previously presented) The process according to claim 1, wherein the active component of the catalyst comprises Pt and Sn.

6. (Canceled)

7. (Currently amended) The process according to claim 1, wherein the hydrogenation results in a product selected from the group consisting of 1,2-propanediol, 1,2-butanediol, 1,2-pentanediol, 1,3-pentanediol, leucinol, isoserinol, valinol, isoleucinol, serinol, threoninol, lysinol, phenylalaninol, tyrosinol, prolinol, 2-chloropropanol, 2-methyl-1-butanol, 2,3-dimethylbutane-1,4-diol, 2-methylbutane-1,4-diol, 1,2,4-butanetriol, 1,2,5-pantanetriol, 1,2,6-hexanetriol, 2-hydroxy- γ -butyrolactone, 3-hydroxy- γ -butyrolactone, 2-chloro- γ -butyrolactone, 3-chloro- γ -butyrolactone, 2-amino- γ -butyrolactone, 3-amino- γ -butyrolactone, 2-methyl- γ -butyrolactone, 3-methyl- γ -butyrolactone, ~~3-hydroxy-valerolactone, 3-hydroxy- δ -valerolactone, 4-hydroxy-valerolactone, 4-hydroxy- δ -valerolactone, 2-hydroxytetrahydrofuran, 2-methyltetrahydrofuran, 2-aminotetrahydrofuran~~, and 3,4-dihydroxybutyric acid.

8. (Previously presented) The process according to claim 1, wherein the catalyst is a supported catalyst.

9. (Previously presented) The process according to claim 8, wherein the catalyst, based on the total weight of the catalyst and calculated as the metal, comprises from 0.01 to 30% by weight of the noble metal and from 0.01 to 50% by weight of the at least one further element.

10. (Previously presented) The process according to claim 8, wherein the support material is selected from ZrO₂, TiO₂, Al₂O₃, SiO₂, activated carbon, carbon blacks, graphites or high-surface area graphites.

11. (Currently amended) The process according to ~~claim 10, claim 8~~, wherein the noble metal and the at least one further element are applied to the support in the presence of a reducing agent.

12. (Previously presented) The process according to claim 1, wherein the hydrogenation is conducted at a pressure of from 100 to 300 bar.

13. (Currently amended) The process according to ~~claim 12, claim 1,~~ wherein the hydrogenation is conducted at a temperature of from 30 to 180°C.

14. (Previously presented) The process according to claim 1, wherein the hydrogenation is conducted in the presence of an acid.

15. (Currently amended) The process according to claim 2, wherein ~~at-the at least~~ one further element is selected from the group consisting of: Sn, Ge, Cr, Mo and W.

16. (Currently amended) The process according to claim 2, wherein ~~at-the at least~~ one further element is Sn.

17. (Previously presented) The process according to claim 1, wherein the active component of the catalyst consists essentially of Pt and Sn.

18. (Currently amended) A process for preparing optically active compounds, the process comprising hydrogenating a substituted optically active mono- or dicarboxylic acid or ~~their corresponding acid derivatives~~ ~~derivative thereof~~ in the presence of a catalyst whose active component comprises a noble metal selected from the group consisting of Pt, Pd, Rh and Ir, and at least one element selected from the group consisting of Sn, Ge, Cr, Mo and ~~W~~, W,

wherein the substituted optically active mono- or dicarboxylic acid or acid derivative thereof has at least one stereocenter in the α- or β-position to at least one carboxylic acid function or acid derivative function to be hydrogenated.

19. (Currently amended) The process according to claim 18, wherein the catalyst is a supported catalyst, and wherein the support material material is selected from ZrO₂, TiO₂, Al₂O₃, SiO₂, activated carbon, carbon blacks, graphites or high-surface area graphites.

20. (Currently amended) The process according to ~~claim 19, claim 18,~~ wherein the hydrogenation is conducted in the presence of a reducing agent, an acid or a reducing agent and an acid.

21. (Previously presented) The process according to claim 18, wherein the active component of the catalyst consists essentially of Pt and Sn.